

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/708,536	0	03/10/2004	Yan Zhou	2535 EXAMINER	
39969	7590	10/18/2005			
SENG-TIO	NG HO		CHIEM, DINH D		
120 PICARI	ADT INTERNATIONAL DARENA				PAPER NUMBER
WHEELING	i, IL 600	90		2883	

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	 	A 1. 4. DI					
•		Application No.	Applicant(s)				
	Office Action Commence	10/708,536	ZHOU ET AL.				
	Office Action Summary	Examiner	Art Unit				
		Erin D. Chiem	2883				
Period fo	The MAILING DATE of this communication or Reply	appears on the cover sheet	vith the correspondence addre	SS			
WHIC - Exte after - If NC - Failt Any	IORTENED STATUTORY PERIOD FOR RICHEVER IS LONGER, FROM THE MAILINg ensions of time may be available under the provisions of 37 CF SIX (6) MONTHS from the mailing date of this communication period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by some reply received by the Office later than three months after the red patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMMUNICATION OF THIS COMMUNI	IICATION. The reply be timely filed ONTHS from the mailing date of this common abandoned (35 U.S.C. § 133).				
Status							
1)⊠	Responsive to communication(s) filed on 1	10 March 2001					
22)		This action is non-final.					
—	,		ttors prospertion as to the m	arita ia			
3)[3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
	ciosed in accordance with the practice unit	del Ex parte Quayle, 1955 C.	D. 11, 453 O.G. 213.				
Disposit	ion of Claims						
4) 🖾	Claim(s) 1-52 is/are pending in the applica	ation.					
	4a) Of the above claim(s) is/are with	ndrawn from consideration.					
5)□	Claim(s) is/are allowed.	·					
<u> </u>							
_	Claim(s) is/are objected to.						
	Claim(s) <u>1-52</u> are subject to restriction and	d/or election requirement.					
	· · · · · · · · · · · · · · · · · · ·	•					
_	ion Papers						
9)	The specification is objected to by the Example 19 to	miner.					
10)	The drawing(s) filed on is/are: a)	accepted or b) ☐ objected to	by the Examiner.				
	Applicant may not request that any objection to	the drawing(s) be held in abeya	ance. See 37 CFR 1.85(a).				
	Replacement drawing sheet(s) including the co	prrection is required if the drawin	g(s) is objected to. See 37 CFR	1.121(d).			
11)	The oath or declaration is objected to by th	e Examiner. Note the attach	ed Office Action or form PTO-	152.			
Priority (under 35 U.S.C. § 119						
	Acknowledgment is made of a claim for for All b) Some * c) None of:		§ 119(a)-(d) or (f).				
	1. Certified copies of the priority docum		**				
	2. Certified copies of the priority docum						
	3. Copies of the certified copies of the	•	n received in this National Sta	age			
	application from the International Bu						
* (See the attached detailed Office action for a	a list of the certified copies no	t received.				
Attachmen	• •						
	ce of References Cited (PTO-892)	·	Summary (PTO-413)				
	ce of Draftsperson's Patent Drawing Review (PTO-948 mation Disclosure Statement(s) (PTO-1449 or PTO/SE		o(s)/Mail Date Informal Patent Application (PTO-15	52)			
•	er No(s)/Mail Date	6) Other: _	• • • • • • • • • • • • • • • • • • • •	,			

Art Unit: 2883

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-22, 32, and 47-52 are drawn to a superlens, classified in class 359, subclass 653.
- II. Claims 35-46, drawn to the method of making the superlens, classified in class385, subclass 33.
- III. Claims 23, 25-31, drawn to a coupling end product in which the superlens is used to couple to waveguides, classified in class 385, subclass 50.
- IV. Claim 33, drawn to the superlens is used in an end product for read and/or write data from an optical storage device, classified in class 369, subclass 112.13.
- V. Claim 34, drawn to the superlens is used in an end product for a mode stripper, classified in class 385, subclass 29.

The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case (2) the lens may be made by the process of drawing perform.

Because these inventions are distinct for the reasons given above and the search required for Invention I is not required for Invention II, restriction for examination purposes as indicated is proper.

Art Unit: 2883

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of In re Ochiai, In re Brouwer and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder. Further, note that the prohibition against double

Art Unit: 2883

patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Inventions III and I are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as gradient index lens for collimating light beam and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Because these inventions are distinct for the reasons given above and the search required for Invention I is not required for Invention III, restriction for examination purposes as indicated is proper.

Inventions IV and I are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as gradient index lens for collimating light beam and the inventions are deemed patentably distinct since there is nothing on this record to show them to be

Art Unit: 2883

obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Because these inventions are distinct for the reasons given above and the search required for Invention I is not required for Invention IV, restriction for examination purposes as indicated is proper.

Inventions V and I are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as gradient index lens for collimating light beam and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Because these inventions are distinct for the reasons given above and the search required for Invention I is not required for Invention V, restriction for examination purposes as indicated is proper.

Art Unit: 2883

Inventions III and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions III, a superlens usable as a coupler to a waveguide, is not related invention II, a method of making the superlens.

Inventions IV and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions IV, a superlens is usable as reader and/or writer in an optical storage device, is not related to invention II, a method of making the superlens.

Inventions V and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions IV, a superlens usable as a mode stripper, is not related to invention II, a method of making the superlens. In the instant case the different inventions IV,

Inventions IV and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions IV, a superlens is usable as a reader and/or writer in an optical storage device, is not related to an optical coupler.

Inventions V and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different

Art Unit: 2883

functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different invention IV, a superlens is usable as a reader and/or writer in an optical storage device, and invention V, a superlens is usable as a mode stripper.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

An examination of this application reveals that applicant is unfamiliar with patent prosecution procedure. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed.

Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skilled preparation and prosecution. The Office cannot aid in selecting an attorney or agent.

A listing of registered patent attorneys and agents is available on the USPTO Internet web site http://www.uspto.gov in the Site Index under "Attorney and Agent Roster." Applicants may also obtain a list of registered patent attorneys and agents located in their area by writing to the Mail Stop OED, Director of the U. S. Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450

Furthermore, the current application, namely the claims, contains many clarity issues that are rejectable under 35 U.S.C. 112 second paragraph. For example, claims 36-45 are depending on incorrect claims or could this be a lack of antecedent basis? Another example, claim 33 the

Art Unit: 2883

recitation "and/or" would be rejectable under 35 U.S.C. 112 second paragraph for broad limitation followed by narrow limitation in the same claim is considered indefinite. The applicant is advised to revised the claims after Applicant has elected a single invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erin D. Chiem whose telephone number is (571) 272-3102. The examiner can normally be reached on Monday - Thursday 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Erin D Chiem Examiner Art Unit 2883

Frank G. Font Supervisory Primary Examiner Technology Center 2800

Frank Il Font